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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ़”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 11940 (1987): Hide-Faced Hammers [PGD 6: Earth, Metal And Wood Working Hand Tools]

“ज्ञान से एक नये भारत का निर्माण”

Satyanaaranay Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”



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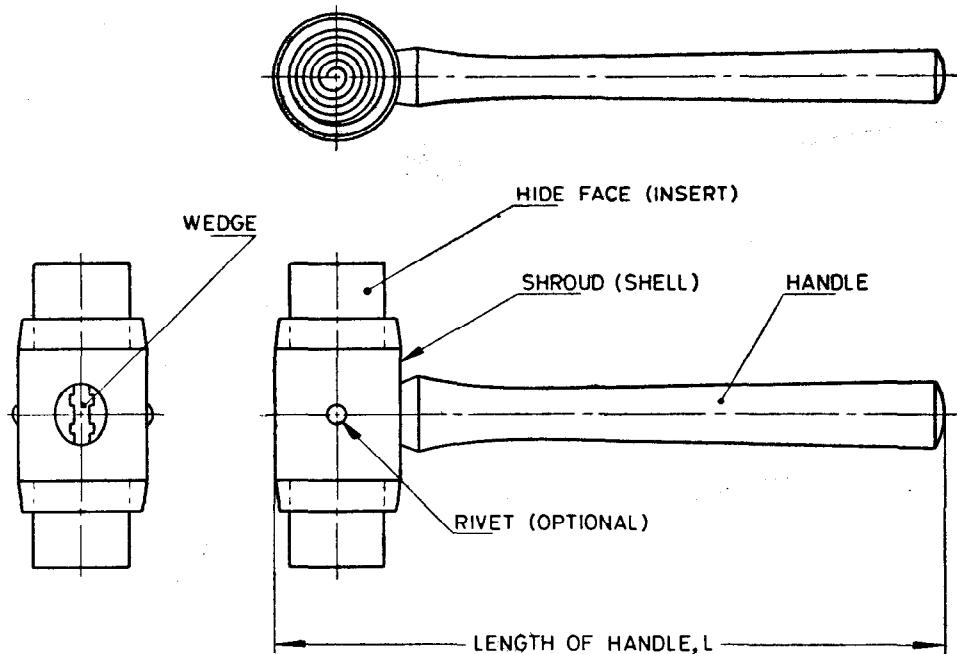
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Indian Standard

SPECIFICATION FOR HIDE-FACED HAMMERS

1. **Scope** — Specifies the dimensions and other requirements of hide-faced hammers.

2. **Nomenclature** — Shall be as given below.



3. Dimensions

3.1 Dimensions of hide-faced hammers shall be as given in Table 1.

3.2 **Tolerances** — A tolerance of ± 2.5 millimetres shall be permitted on the dimensions of eye (that is, E & F).

4. **Mass** — The mass of hammer (shroud with insert) shall be as specified in Table 1 subject to a tolerance of ± 10 percent.

5. **Material** — Shall be as given below :

Component	Material
Shroud (shell)	Cast iron conforming to grade FG 200 of IS : 210-1978 'Grey iron castings (third revision)' or malleable cast iron conforming to IS : 2108-1977 'Black-heart malleable iron castings (first revision)'.
Hide faces (Inserts)	High grade arsenicated buffalo raw hide, pressed hydraulically and seasoned, meeting the requirements laid down in 8.1.
Wedge	Mild steel/wood.
Round head nails	Mild steel.

5.1 Handle — If supplied with the hammer, it shall conform to Grade 5 of IS:620-1975 'General requirements for wooden tool handles (*third revision*)' or as agreed to between the manufacturer and the purchaser.

6. Designation — Hide-faced hammers shall be designated by its commonly used name, nominal size and number of this standard.

Example:

Hide-faced hammer of nominal size 38 mm shall be designated as:

Hammer Hide-Faced 38 IS:11940

7. Workmanship and Finish

7.1 Hammers shall be well shaped and free from burrs, flaws, seams or other defects. The shrouds and wedges shall be finished smooth and all sharp edges shall be removed.

7.2 The hide face (*insert*) shall be made of one piece of raw hide with not more than two filler strips. The hide shall be wound in a smooth spiral cylindrical shape. Joints at ends of the spirals may be glued or moulded and pinned lap by a round head nail. If a nail is used it shall not be more than 5 mm off the centre of the insert. Striking faces shall be slightly convexed and shall not be more than 2° off the perpendicular measured at any position on the side of the insert.

7.2.1 The handles shall be fixed in such a way that it does not loosen or rotate in the eye, while in use. In case, desired by the purchaser, round eye cross-section handles with a rivet (*optional*) may be provided in the shroud having round hole of diameter equal to dimension *E*.

7.3 The shrouds shall be given an anticorrosive treatment, like painting or galvanising to avoid rust.

7.4 The inserts shall be completely covered with moisture resistant coating. Wooden handles shall be given suitable varnish coating.

8. Tests

8.1 *Folding Test for Hide Faces* — The hide strips used in hide faces shall be folded side out and refolded at riget angles. Further refolding shall be done at an angle of 180°, keeping the internal radius of the bend not more than 6.5 mm. The folded surfaces shall not show any signs of cracks or damaged grains.

8.2 *Impact Test* — Place samples of hide-faced hammers, arranged to simulate actual use on a steel plate. Drop a cylindrical mass of 1 kg, through a height of 1 metre through seamless tubing, having its internal diameter slightly larger than the diameter of cylindrical mass, to ensure full force of the mass acting on the normal striking face. The sample shall not break, crack or significantly distort when the mass has been dropped 10 times.

9. Sampling — Unless otherwise agreed to between the purchaser and the supplier, for sampling inspection, the methods given in IS : 2500 (Part 1)-1973 'Sampling inspection tables:Part 1 Inspection by attributes and count of defects (*first revision*)' shall be followed. The inspection level and Acceptable Quality Level (AQL) for various characteristics shall be as given in 9.1.

9.1 For dimensions, visual examination, workmanship and finish and tests the single sampling plan with inspection level II and AQL 6.5 percent as given in Tables 1 and 2 of IS:2500 (Part 1)-1973 shall be followed.

10. Packing — Individual hammer shall be properly wrapped in kraft paper and then in cardboard box. These boxes shall be then packed in wooden crates as per the best trade practices. Hide faces (*inserts*), when ordered separately, shall be wrapped with a maximum of 12 hides (*six pairs*).

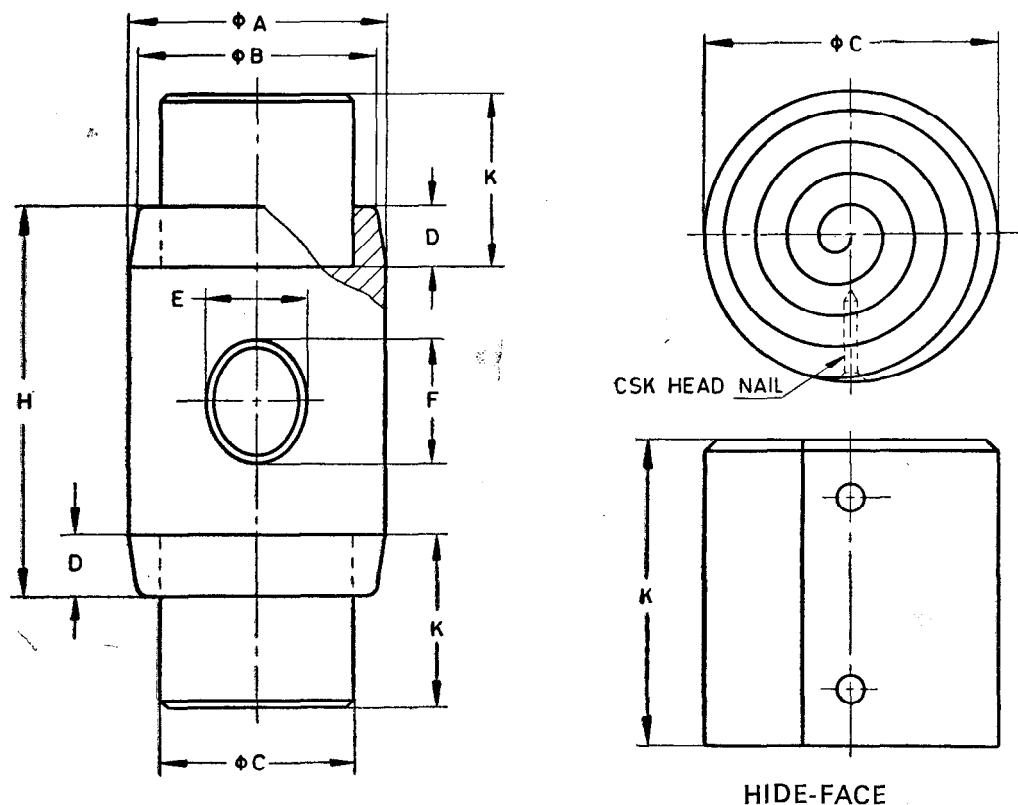
11. Marking — Shrouds and hide faces shall be marked with manufacturer's name, initials trade-mark, nominal size, and nominal mass.

11.1 Certification Marking — Details available with the Bureau of Indian Standards.

TABLE 1 DIMENSIONS AND MASS OF HIDE-FACED HAMMERS

(Clause 3.1 and 4)

All dimensions in millimetres.



HIDE-FACE

Nominal Size	Nominal mass*	Shroud							Hide-Face		Length of Handle L Min
		A	B	C	D	H	E	F	C ± 1.0	K	
38	750	48	44	38	15	72	22	26	38	40	320
45	1500	58	53	45	15	90	26	32	45	40	360
50	2000	67	62	50	16	102	26	32	50	45	360

* The nominal mass excludes the mass of handle.

Note — The dimensions given above are nominal.

EXPLANATORY NOTE

Hide-faced hammers are one, in the series of soft-faced hammers, used for hammering while finishing surfaces without causing damage or bruising to the product. These are generally used for sheet metal work.

While preparing this specification, considerable assistance has been derived from the details supplied by leading users of this product. Assistance has also been taken from Joint Services Specification JSS 5120-37 'Hammer hide-faced 1815 g' issued by Ministry of Defence, Government of India, and T.G. 3-1941 'Specification for hides and leather', issued by Technical Co-ordinating Committee on General Stores (UK).